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Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554

FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF SECRETARY

In the Matter of )

Preparation for International )  
Telecommunication Union World )  
Radiocommunication Conferences )

IC Docket No. 94-31

DOCKET FILE COPY ORIGINAL

To: The Commission

TELECOMMUNICATIONS INDUSTRY ASSOCIATION  
COMMENTS IN SUPPORT OF  
ASSOCIATION OF AMERICAN RAILROADS  
PETITION FOR PARTIAL CLARIFICATION AND RECONSIDERATION

In its Report for the above-captioned proceeding, the Commission recommends that the 1995 World Radiocommunication Conference ("WRC-95") reallocate the upper 6 GHz (6.650-7.075 GHz) band to accommodate Non-Geostationary Mobile-Satellite Service ("NGSO MSS") feeder links.<sup>1</sup> Under this proposal, terrestrial fixed point-to-point microwave service ("FS") users, which have been allocated that band on a primary basis, would be required to share it with NGSO MSS feeder links on a co-primary basis.

On July 17, 1995, the Association of American Railroads ("AAR") filed a Petition for Partial Clarification and Reconsideration ("Petition") of the Report.<sup>2</sup> In its Petition, AAR requests that:

the Commission reconsider its proposal to allocate spectrum at 6 GHz for MSS feeder links. Should the 6 GHz band be designated internationally for NGSO [MSS] feeder link use, AAR urges the Commission to clarify and strengthen its commitment to protect the fixed microwave licensees' rights to occupy the 6 GHz band.<sup>3</sup>

<sup>1</sup>Preparation for International Telecommunication Union World Radiocommunication Conferences, Report, IC Docket No. 94-31 (FCC 95-256, released June 15, 1995) at para. 49. See also United States Proposals for the 1995 World Radiocommunication Conference, Proposals for Agenda Items 2.1c and 3d, Allocations for Feeder Links for the Mobile-Satellite Services, Document No. 010-E (July 11, 1995).

<sup>2</sup>Public Notice of the Petition was issued July 21, 1995. 60 FR 38339 (July 26, 1995).

<sup>3</sup>Petition at 1.

The Fixed Point-to-Point Communications Section, Network Equipment Division of the Telecommunications Industry Association ("TIA"),<sup>4</sup> hereby supports grant of the Petition. As demonstrated herein, such action would be in the public interest because it would eliminate or mitigate the disastrous impact that the recommended reallocation of the upper 6 GHz band for NGSO MSS feeder links would have on the FS industry and on the PCS industry.

The upper 6 GHz band is allocated on a primary basis for FS. To clear spectrum for PCS, the Commission has required that FS users migrate from the 2 GHz band to bands above 3 GHz, including the upper 6 GHz band. Moreover, PCS licensees will use FS networks in the upper 6 GHz band to support their operation.

All of this happens at a time when key users of the upper 6 GHz band are considering radical expansion plans for their microwave systems. A recent paper presented at the August 3, 1995, annual UTC meeting by TIA members Harris Corporation-Farion Division ("Harris") and AT&T Bell Laboratories ("AT&T") illustrates these increased demands by existing upper 6 GHz users:

Not unlike other telecom users and providers everywhere in this Information Age, utilities are especially aware of a period of unprecedented growth and opportunity challenging the very fabric and composition of their existing networks. Population and economic growth, automation and control, cost reductions, deregulation of the power (new competition) and telecommunications (new opportunities) industries, legislation for more reliable service and rapid disaster recovery, and especially the interconnection of perhaps hundreds of decentralized LANs supporting thousands of ever more powerful work stations are just a few of the drivers towards the expansion and broadbanding (voice, data, image, video) of many utility networks.

\* \* \* \* \*

A 1990s 10% to 20% annual bandwidth growth rate is projected of just the administrative networking and control circuits in a typical utility, this excluding any extensive telecom systems expansion to accommodate new technology, entrepreneurial excursions into "excess bandwidth" reselling to alternative local transport providers,

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<sup>4</sup>TIA is the principal industry association representing FS manufacturers. TIA members serve, among others, companies, including telephone carriers, utilities, railroads, state and local governments, and cellular carriers, licensed by the Commission to use private and common carrier bands for provision of important and essential telecommunications services.

and extending fiber to residential customers. As the Edison Electric Institute told the U.S. House Subcommittee on Telecommunications and Finance considering the passage of S1822 (The Communication Act of 1994): "All electric utilities or their [telecommunications] affiliates must be assured of the opportunity to participate in the telecommunications business" as the only effective competitors to the telephone companies and cable television industry.<sup>5</sup>

Unfortunately, as the result of the Commission's unjustified recommendation to reallocate the upper 6 GHz band for NGSO MSS feeder links at WRC-95, it is highly questionable if this critical band will be available to FS users to meet all these demands.

The upper 6 GHz band already is quite congested. This overcrowding could become worse if the Commission's recommendation to reallocate the upper 6 GHz band, so that FS users would "share" this band with NGSO MSS feeder links on a co-primary basis, is adopted at WRC-95.<sup>6</sup> Up to a 30% decrease in available spectrum in the upper 6 GHz band, and severe path degradation, could plague FS users if they are made co-primary with NGSO MSS feeder links.

Inexplicably, the Commission has ignored this problem. Despite widespread industry opposition,<sup>7</sup> the Commission attempts to justify its recommendation, that FS users share these bands with NGSO MSS feeder links, by promising that it will "give priority in the 6 GHz and 11 GHz bands to relocated 2 GHz microwave licensees during a reasonable period of time."<sup>8</sup> This commitment is

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<sup>5</sup>"Towards 2000 - The Application of SONET Transport Microwave Radio to Utilities Telecom Networks," by K. Bromberg, R. Laine, and R. Lunan of Harris and B. Johnson of AT&T (August 3, 1995) at 1-2.

<sup>6</sup>In the Report at para. 49, the Commission also recommends reallocation of the 11 GHz and 18 GHz bands for NGSO MSS feeder links. Given the existing spectrum shortage in the 11 GHz band and the decreasing availability of spectrum in the 18 GHz band, this aggregate reallocation for NGSO MSS feeder links would reduce significantly the relocation options for displaced 2 GHz FS users and the system options for new FS and PCS licensees.

<sup>7</sup>See, e.g., May 15, 1995, Late Further Reply Comments On Second Notice of Inquiry; April 28, 1995, Statement of Non-Concurrence in Final Report of IWG-4. The FS interests represented in these two (2) filings are Alcatel Network Systems, Inc., American Petroleum Institute, Associated Public-Safety Communications Officials International, AAR, AT&T, Harris, TIA, and UTC.

<sup>8</sup>Report at para. 53.

nothing more than a "Pyrrhic victory." Once NGSO MSS feeder links invade the upper 6 GHz band and preempt a significant amount of the already dwindling spectrum for FS users, this priority treatment will be ineffective because there will be inadequate capacity available.

AAR agrees that the Commission's commitment, to give FS users "priority" in the upper 6 GHz band, is meaningless. AAR correctly points out that it is unclear how the contemplated priority for displaced FS users will be established and what will happen to these FS users once their "priority" status is rescinded.<sup>9</sup> Moreover, AAR demonstrates that giving such priority could create unnecessary conflicts among FS users or between FS and MSS users.<sup>10</sup>

As the Commission itself acknowledged, the success of the 2 GHz relocation process for PCS is critically dependent upon the availability of replacement facilities for the fixed microwave incumbents presently occupying the 2 GHz band. Unfortunately, however, the Commission seems to have ignored the unalterable fact that the needs of the fixed microwave users will not disappear upon completion of relocation or after the passage of "a reasonable period of time" thereafter. Unless changed or clarified, the Commission's language at paragraph 53 of the Report portends disruption and compromise of the primary status of the fixed microwave systems upon "conclusion of the relocation negotiations" and "commencement of their new operations." It is the needs of the users which dictate the demands on particular radio systems, not procedures or time periods. In the case of the fixed microwave users, those needs will not change subsequent to the commencement of operations at new frequencies because the underlying nature of the use will remain the same. The railroads, for example, will continue to require systems that guarantee the highest level of communications reliability to assure the safe operation of the nation's railroads.<sup>11</sup>

Even if these "logistical" issues regarding how the FS users' priority status will be implemented, an even more fundamental issue still must be resolved. Allowing NGSO MSS feeder links into the upper 6 GHz band, as well as into the 11 and 18 GHz bands, unquestionably will be catastrophic for existing and future FS and PCS networks. Until this critical issue is addressed, and until adequate safeguards against NGSO MSS feeder link interference to FS users are established,

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<sup>9</sup>Petition at 4-5.

<sup>10</sup>Petition at 4.

<sup>11</sup>Petition at 5-6 (footnotes omitted).

the Commission's efforts to ensure a seamless and expedited transition to wireless services will be stymied. Thus, TIA strongly supports grant of AAR's Petition.

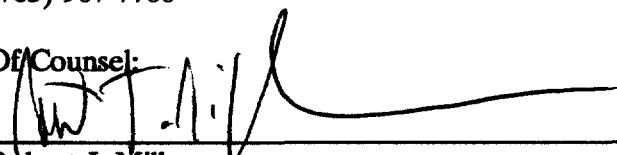
FIXED POINT-TO-POINT COMMUNICATIONS  
SECTION, NETWORK EQUIPMENT DIVISION  
OF THE TELECOMMUNICATIONS  
INDUSTRY ASSOCIATION

  
\_\_\_\_\_  
GEORGE M. KIZER, CHAIRMAN  
DENIS COUILLARD, VICE CHAIRMAN  
ERIC SCHIMMEL, VICE PRESIDENT OF TIA

2500 Wilson Blvd., Suite 300  
Arlington, Virginia 22201

(703) 907-7700

Of Counsel:

  
\_\_\_\_\_  
Robert J. Miller  
Gardere & Wynne, L.L.P.  
1601 Elm Street, Suite 3000  
Dallas, Texas 75201  
(214) 999-3000

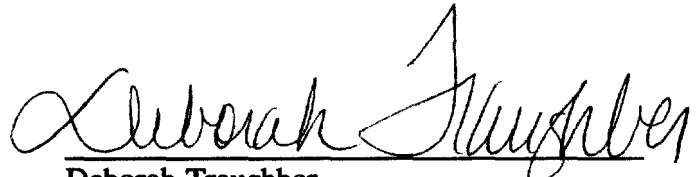
August 9, 1995

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## CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing Telecommunications Industry Association Comments in Support of Association of American Railroads Petition for Partial Clarification and Reconsideration was sent via first class mail, postage prepaid, on the 9th day of August, 1995, to:

Thomas J. Keller, Esq.  
Verner, Liipfert, Bernhard,  
McPherson and Hand  
901 15th Street, N.W., Suite 700  
Washington, D.C. 20005-2301  
Counsel for Association of American Railroads

  
Deborah Traugher